1.	pplication No.	Applicant(s)
Notice of Allowability Ex	0/672,986	YOON, MIN-CHOL
	xaminer	Art Unit
	useyin Koca	3744
The MAILING DATE of this communication appears I claims being allowable, PROSECUTION ON THE MERITS IS (OF erewith (or previously mailed), a Notice of Allowance (PTOL-85) or OTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGH the Office or upon petition by the applicant. See 37 CFR 1.313 an	R REMAINS) CLOSED in other appropriate communits. This application is s	n this application. If not included unication will be mailed in due course. <b>THIS</b>
☐ This communication is responsive to <u>Amedment After Non-Fir</u>	al Rejection.	
☐ The allowed claim(s) is/are 1,4 and 5.		
Acknowledgment is made of a claim for foreign priority under a) ⊠ All b) ☐ Some* c) ☐ None of the:		or (f).
1. Certified copies of the priority documents have be		
2. Certified copies of the priority documents have be		
<ol><li>Copies of the certified copies of the priority documents.</li></ol>	ients have been received	d in this national stage application from the
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of t noted below. Failure to timely comply will result in ABANDONMEN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	T of this application.	
A SUBSTITUTE OATH OR DECLARATION must be submitted INFORMAL PATENT APPLICATION (PTO-152) which gives recommended in the control of the contro		
CORRECTED DRAWINGS ( as "replacement sheets") must be	e submitted.	
(a) ☐ including changes required by the Notice of Draftsperson'	s Patent Drawing Reviev	พ ( PTO-948) attached
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's A Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84( each sheet. Replacement sheet(s) should be labeled as such in the I	c)) should be written on the ader according to 37 CF	he drawings in the front (not the back) of FR 1.121(d).
<ul> <li>DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FO</li> </ul>	of BIOLOGICAL MATI R THE DEPOSIT OF BIO	ERIAL must be submitted. Note the OLOGICAL MATERIAL.
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ttachment(s)	5 <b></b>	Consul Detect Application
. 🛛 Notice of References Cited (PTO-892)		nformal Patent Application
		lummary (PTO-413), /Mail Date
☐ Notice of Draftperson's Patent Drawing Review (PTO-948)		
☐ Information Disclosure Statements (PTO/SB/08),	7. 🗌 Examiner's	Amendment/Comment
☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  ☐ Examiner's Comment Regarding Requirement for Deposit	7. 🔲 Examiner's	s Amendment/Comment s Statement of Reasons for Allowance
. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) . ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	7. 🔲 Examiner's	Statement of Reasons for Allowance

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## **DETAILED ACTION**

## **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joseph P. Krause on 01/02/2008.

The applicant has been amended as follows:

In regard to claim 1, line 34, "holes.; and" has been deleted and replaced by --holes; and--

In regard to claim 1, line 36, "member towards the second location.." has been deleted and replaced by --member towards the second location.--

## Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance: The prior art, Lee (5,888,055), discloses connection between a refrigerant pipe and a suction muffler of a hermetic reciprocating compressor. The prior art, Anderson, Jr. (5,081,847), teaches a variable flow restrictor. The prior art, Lee (5,988,990), discloses an apparatus for separating lubricating oil from refrigerant in a hermetic compressor. The claim 1 is allowable because the prior arts of record, do not anticipate nor render obvious the combination set forth in the independent claim, and specifically does not show a suction

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muffler comprising a flow controller; wherein the flow controller comprises a fixing member having a main refrigerant path, embodied as a first hole having a center line and forming a cylinder having a circumferential surface, and extending through the fixing member, a plurality of refrigerant sub-paths, each refrigerant sub-path embodied as a second hole having a corresponding center line and penetrating the fixing member, said second holes being located adjacent to the first hole and spaced around the first hole center line at predetermined intervals such that the second hole center lines are located on a geometric circle centered on the first hole center line, and a cylindrical space with a diameter large enough to encircle the plurality of second holes, said cylindrical space being formed under the main refrigerant path hole and the plurality of refrigerant sub-path holes; a movable member having a through hole that extends through the movable member, the through hole having a center line substantially coincident with the center line of the first hole in the fixing member, the movable member also having a plurality of second through holes formed at predetermined intervals on a geometric circuit having a diameter greater than the diameter of the geometric circle that encircles said plurality of refrigerant sub-paths, said movable member being disposed in the space of the fixing member to move between a first location that closes the plurality of refrigerant sub- paths and a second location whereat the plurality of refrigerant sub-paths are open, the movable member further comprised of a guide having an outer circumferential surface sliding and touching the circumferential surface of the main refrigerant path, the guide formed with the first through hole, and a disk of a predetermined thickness with the outer circumferential

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surface sliding and touching the inner circumferential surface of the space, the disk formed with a plurality of through holes; and a resilient member resiliently supporting the movable member and biasing that member towards the second location.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

- 3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huseyin Koca whose telephone number is (571) 272-3048. The examiner can normally be reached on Monday Friday 9:00AM to 4:00PM.
- 4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- 5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HK/

FRANTZ JULES SUPERVISORY PATENT EXAMINER

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